

CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

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SECURITY INFORMATION

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THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.
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(FOR KEY SEE REVERSE)

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1. General Organization

- a. The VEB Werk fuer Fernmeldewesen HF, Berlin-Oberschoeneweide, Ostendstrasse 1-5, formerly AEG, was dismantled by the Soviets in 1945. It was subsequently re-established as a Soviet-controlled industry (SAG) and, in May 1952, formally turned over to East German management as a VEB. The plant includes the three former branches:
- (1) NEF (Nachrichten-Entwicklung und Fertigung) (Communications Development and Production)
 - (2) QSW (Oberspreewerk)
 - (3) TGE (Telegraphie-Geraetefertigung) (Telegraphic Equipment Production)
- b. Approximately 95 percent of the production and development of the VEB is for the USSR; a small proportion is for Poland and the following East German bureaus
- (1) East German Ministry for Planning (Planungsministerium der DDR)
 - (2) Ministry for Post and Telecommunications (Ministerium fuer Post- und Fernmeldewesen)
 - (3) State Broadcasting Committee (Staatliche Rundfunk Komitee)
- Private industry in East Germany is responsible for a very small proportion of orders.
- c. Almost all new developments result from Soviet orders for delivery to the USSR, and are paid for by the Soviet authorities. However, the following items are under development for Poland and the East German government:

25 YEAR RE-REVIEW

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Poland
 Telemetering channels (Fernwirk-
 Kanäle)
 Frequency measuring installations
 (Frequenzmessanlagen)
 Telephone

East Germany
 Television cameras (Fernsehkameras)
 Television transmitters (Fernsehsender)
 Dias (double?) scanners (Dias-
 Abtaster)
 High and intermediate frequency
 measuring points (Hoch u. Mittel-
 frequenzmessplaetze)
 Instruments for internal consumption
 and output observation (Geräte fuer
 internen Bedarf u. Fertigungsüber-
 wachung)

- d. Almost all vacuum tubes produced, including cathode ray tubes, metal ceramic tubes for centimeter waves, and transmitting tubes of all types, as well as new models of special tubes such as thyratrons and superhigh pressure lamps (Hochst Drucklampen), are sent to the USSR, generally to a Moscow address.

2. NET

The following equipment is under development or in production:

Fernmessanlagen	Telemeters
EWT-Telefonie	EWT-telephone / power line carrier telephone system
Traegerfrequenztelefonie	Carrier frequency telephone
Verstaerker aller Art	Amplifiers of all kinds
Stromversorgungsgeraete	Power supply apparatus
Scheinleitwertmessbruecken 8 mhz, 1 mhz, 300 khz	Admittance measuring bridges, 8 Mc, 1 Mc, 300 kc.
Durchgriffskapazitaetsmess- bruecken 10^{-4} pF - 20 pF	Through capacitance measuring bridge, 10^{-4} μ fd to 20 μ fd
Roehrenvoltmeter 1,5 mV 5 mhz	Vacuum tube voltmeter 1.5 mv, 5 Mc
Mikroroehrenvoltmeter 0,1 bis 300 mhz 5 μ v	Micro vacuum tube voltmeter (0.1 to 300 Mc, 5 μ v)
Scheinwiderstandsmesser bis 400 mhz	Impedance meter (to 400 Mc)
Pruefsender aller Art	Test transmitters of all kinds
Spannungsanalysatoren	Voltage analyzers
Frequenzanalysatoren	Frequency analyzers
Blattfernschreiber	Blattfernschreiber / Telefax
Lochstreifensender	Perforated tape transmitter
Messmikrophon	Measuring microphone
Fernwirkkanäle	Telemetering channels
Einseitenbandtelefonie	Single sideband telephone system
Phasenmesser (20 mhz)	Phasemeter (20 Mc)

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Hoch-Tief- u. Bandpaesse sowie Filter aller Art	High-, low- and band-pass filters as well as all types of filters
Präzisionsfrequenzmessplatz 1 khz bis 20 mhz $\pm 5 \cdot 10^{-7}$	Precision frequency measuring points (1 kc to 20 Mc $\pm 5 \times 10^{-7}$)
Automatischer Daempfungsmessplatz	Automatic damping measuring point
Eichleitungen bis 100 mhz Z= 75 KU	Calibration circuits to 100 Mc Z= 75 kU <u>/kilohms?</u>
Eichleitungen bis 20 mhz Z= 75 ohms und 150 ohms	Calibration circuits to 20 Mc Z = 75 ohms and 150 ohms
Eichleitungen bis 1 mhz Z= 600 ohms/symm. und unsymm.	Calibration circuits to 1 Mc Z = 600 ohm/balanced and unbalanced
Regelbare Daempfungsglieder bis 200 mhz	Adjustable damping elements to 200 Mc
Ueberlagerungsempfaenger fuer Messzwecke	Heterodyne receivers for measuring purposes
Schaltfelder fuer Messzwecke	Control fields for measuring purposes
Pegelbildgeraete	Image level equipment (?)
Kuenstliches Ohr und kuenstlicher Mund fuer Ela-Messzwecke	Artificial ear and artificial mouth for <u>Ela</u> measuring purposes
Schaltungsgeraete	Switching equipment
Nebensprechmessplaetze	Crosstalk measuring points

3. OSW

The following apparatus, vacuum tubes, and lamps are under development or in production:

Fernsehsender	Television transmitters
Fernsehempfaenger	Television receivers
Ikonoskope	Iconoscopes
Superikonoskope	Supericonoscope
Vollstaendige Fernsehkameras	Complete television cameras
Diasabtaster	Dias <u>/double?</u> scanner
Messleitungen fuer Zenti- und Deci-Technik (Radar- und UKW-Gebiet)	Measuring circuits for centimeter and decimeter waves (radar and ultra-wave range)
Ueberlagerungswellenmesser im Deci- und Metergebiet	Heterodyne wave meter in the decimeter and meter band
Hochleistungselektronen-strahl- oszillographen (auch fuer Impulstechnik)	High-power cathode ray oscillographs (also for pulse techniques)
Kapazitative Spannungsteiler 8-100 cm	Capacitive voltage divider 8-100 cm

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Frequenzhubmesser in Zentimeter, Decimeter- und Meterwellengebiet	Frequency deviation meter in centimeter, decimeter and meter band
Absorptionswellenmesser im Zentimetergebiet	Absorption wave meter in the centimeter band
Empfindlichkeitssender im UKW-Gebiet fuer AM und FM (9-100 cm)	Sensitivity transmitter in the ultra-short wave band for AM and FM (9-100 cm)
Spektrometer zur Senderueberwachung aller Frequenzbereiche (10,000 bis 2,500 mhz, 3-12 cm)	Spectrometer for transmitter monitoring for all frequencies (10,000-2500 Mc, 3012 cm)
Feldstaerkemesser aller Frequenzbereiche (0.75 bis 3000 m)	Field intensity meter for all frequencies (0.75-3000 m)
Elektromagnetische Elektronenmikroskope (1:100,000)	Electromagnetic electron microscopes (1:100,000)
Niederspannungsgleichrichter-roehren	Low-voltage rectifier tubes
Hochspannungsgleichrichter	High-voltage rectifiers
Hochspannungs-Hochvakuum-Gleichrichter	High-voltage, high-vacuum rectifiers
Ultraviolettbbrenner	Ultraviolet lamp
Thyratron	Thyratron
Quecksilberhochdrucklampen	High-pressure mercury lamps
Quecksilberhochstdrucklampen	Super-high-pressure mercury lamps
Neon-Roehren der Amerika-Serie	Neon tubes of the America-series
Reinloch-Roehren	<u>Reinloch</u> tubes
Metallkeramikroehren	Metal-ceramic tubes
Senderoehren bis 100 kw Verlustleistung	Transmitter tubes to 100 kw power dissipation
Kurzwellensenderoehren	Short-wave transmitter tubes
Roehren fuer Spezialzwecke (kleinste Wellenlaengen)	Special tubes (shortest wave lengths)

4. Division for Measuring Instruments (Abteilung fuer Messgeraete)

- a. The following apparatus is in production as fully developed equipment or is in the course of development:

Nebensprechmessplaetze	Crosstalk measuring points
Mittel- Hochfrequenzmessplaetze	Intermediate and high frequency measuring points
Scheinleitwertsmessbruecken	Admittance measuring bridges
Durchgriffskapazitaetsmessbruecken	Through capacitance measuring bridges
Eichleitungen	Calibrating circuits

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~~Ueberlagerungsempfänger~~~~Heterodyn-receivers~~

Selektive Anzeigeverstärker

Selective indicating amplifiers

Hochfrequenz-Messender

High-frequency test transmitter

Frequenzmessplatz

Frequency measuring point

Automat Dämpfungsmessplatz

Automatic damping measuring point

~~Frequenzmessplatz~~

Frequency analyzers

In addition, certain apparatus are being developed under the personal supervision of the head of the division, Dr. Moser. Details are given in paragraph 6b below.

- b. One section of this division is working on the development of the following:

Normalfrequenzgeräete

Standard frequency equipment

Frequenzmessplatz (Modulatoren, Frequenzvielfacher, Quarzgeneratoren, selektive Verstärker, Breitbandverstärker, Frequenzzeiger, Frequenzteiler, Steuergeräten und Impulstechnische Apparaten)

Frequency measuring points (modulator, frequency multiplier, crystal-controlled oscillator, selective amplifier, broad-band amplifier, frequency indicator, frequency divider, master oscillators, pulse-technique equipment)

- c. The instruments and other equipment developed by this division are built to a high standard of precision and are used within the VEB for basic research, development of other electrical apparatus and in a few special instances such as for monitoring of communications installations and output (Überwachung von Nachrichten-Anlagen und Fertigung).

5. Personnel:

The following are division chiefs within the NEF:

Power supply (Stromversorgung)	Wesser
Amplifiers (Verstärker)	Dipl. Ing. Steffenhagen
Teletypewriter (Fernschreiber)	Dipl. Ing. Rieger
Telemeter (Fernmessung)	} Dipl. Ing. Lauenroth
Telemetering channels (Fernwirkkanäle)	
Single-Sideband telephone system (Einseitenbandtel)	
Special instruments (Sondergeräte)	Dipl. Ing. Springstein
Filters (Filter)	Ing. Bellak
Carrier frequency techniques (Trägerfrequenz-technik)	Dipl. Ing. Kleinschmitz
Meters (Messgeräte)	{ Dipl. Ing. Seidel Dr. Moser
Electro-acoustics (Elektroakustik)	Dipl. Ing. Dombsch
Experimental proving ground (Versuchsprüffeld)	Ing. Wobring

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6. Returnees

- a. Dr. Peter Neidhardt. A specialist in the field of centimeter and decimeter wave techniques, Dr. Neidhardt was head of the scientific department which dealt with advanced theoretical mathematical problems of all frequencies.



- b. Dr. Moser (fnu). UHF specialist and scientist in the Division for Measuring Instruments. At present he is working on the following:

Mikrorohren-Voltmeter (5 Vo 1 mhz bis 300 mhz)	Micro vacuum-tube voltmeter (5 v, 1 Mc to 300 Mc)
Scheinwiderstandsmesser bis 400 mhz	Impedance meter (to 400 Mc)
Regelbares Dämpfungsglied bis 200 mhz	Adjustable damping element (200 Mc)

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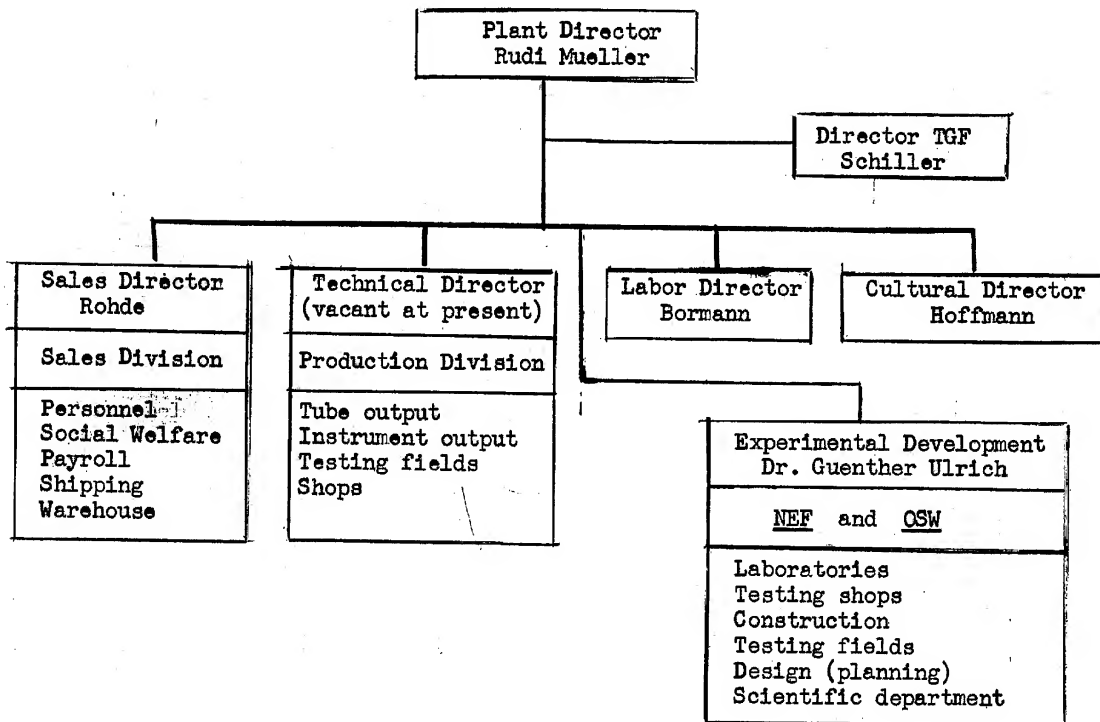
1. Comment. Dr. Neidhardt resigned 25X1
from the OSW during December 1952. 25X1

ATT: Appendix showing organization of Werk fuer Fernmeldewesen HF in outline.

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AppendixWerk fuer Fernmeldewesen HF

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